

REMARKS

Claim 1 is currently amended. The amendment is fully supported by the Specification as originally filed and thus does not introduce new matter. Claim 31 has been canceled.

Examiner's Interview

Applicant's representative respectfully thanks Examiner Huan Hoang for the courtesy of discussing the paragraph 5 of the Detailed Action of the above Office Action in a telephonic Examiner's interview on July 26, 2004, initiated by Applicant's representative. During the interview, Examiner Hoang indicated that claim 1 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,469,932, not claim 4 as originally indicated in paragraph 5.

Claim Rejections Under 35 U.S.C. § 102

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Golla et al. (U.S. Patent No. 5,659,509). Applicant respectfully traverses.

Claim 1, as currently amended, includes redundant circuitry comprising a register adapted to indicate different types of row-to-row shorts. Golla et al. does not include this. In Golla et al. when a word line WLi is short-circuited with an adjacent word line, the addresses of the word lines WLi and WLi+1 are programmed into a redundancy register RR2 that is associated with redundancy word lines RWL2 and RWL3 that replace the word lines WLi and WLi+1 (see column 7, line 65 to column 8, line 6). This is not the same as a register adapted to indicate different types of row-to-row shorts, as in claim 1. Therefore, claim 1 should be allowed.

Double Patenting Rejection

Claim 31 is objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of claim 28. Claim 31 has been canceled, thereby overcoming this objection.

Claim 1 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim [3] of U.S. Patent No. 6,469,932. Applicant respectfully traverses.

Claim 1 of the present application, as currently amended, includes redundant circuitry comprising a register adapted to indicate different types of row-to-row shorts. In contrast, claim 3 of U.S. Patent No. 6,469,932 (the '932 patent) includes a defect register to store data indicating

a type of defect, wherein the state machine increments row addresses during an erase operation based on the type of defect stored in the defect register and a logic circuit to selectively signal the state machine when the defect register is accessed that has a type of defect stored that indicates a row to row short. In claim 3 of the '932 patent a row to row short is a type of defect that is indicated. This is not the same as indicating different types of row-to-row shorts, as in claim 1. Nor is indicating different types of row-to-row shorts suggested by claim 3 of the '932 patent. Therefore, claim 1 of the present application is patentably distinct from claim 3 of the '932 patent because claim 1 of the present application requires limitations not included in claim 3 of the '932 patent. Therefore, the rejection of claim 1 under the judicially created doctrine of obviousness-type double patenting should be removed, and claim 1 should be allowed.

Claims 1-3 and 5, 4 and 8, 6, 7, 18, 19, 20, 21, 22, 23, 24, 28, 30, and 32, and 29 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 1, 4, 5, 12, 14, 15, 17, 18, 20, 21, 27, and 28, respectively, of U.S. Patent No. 6,711,056. Applicant has included a Terminal Disclaimer herewith to address this rejection. In view of the Terminal Disclaimer, Applicant respectfully requests reconsideration and withdrawal of the rejection, and allowance of claims 1-8, 18-24, 28-30, and 32.

Allowable Subject Matter

Applicant thanks the Examiner for allowing claims 9-17, 25-27, and 33-37.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 10/774,868

Title: MEMORY WITH ROW REDUNDANCY

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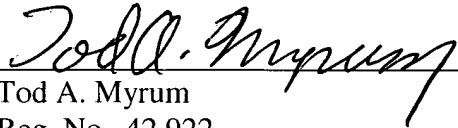
Attorney Docket No. 400.164US02

CONCLUSION

Applicant believes that claims 1-8, 18-24, 28-30, and 32 are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. If the Examiner has any questions regarding this application, please contact the under-signed at (612) 312-2208.

Respectfully submitted,

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